Course: Phys 311 Introductory Quantum Physics I
Term: Fall 2016
Room:SST 106
Class: MWF, 9:00-9:50

INSTRUCTOR CONTACT INFORMATION

Instructor: Huey Huang
Office: Brockman Hall 252
Email: hwhuang@rice.edu
Office Hours: Mon 2-4, Tues 3-5 or by appointment

COURSE OBJECTIVES AND LEARNING OUTCOMES

Physics 311 is the first semester of the introductory quantum physics, a fundamental course for the modern physics. Students are expected to have a basic understanding of partial differential equations and introductory linear algebra. Students will learn the concepts of quantum mechanics, how to describe and manipulate the physical states of quantum objects, and the Schrodinger equations that describe the properties of the physical states, including spin-1/2 systems, and particles in potential wells, including the hydrogen atom.

REQUIRED TEXTS AND MATERIALS

"A Modern Approach to Quantum Mechanics, 2nd ed.", by John S. Townsend

ASSIGNMENTS

Weekly homework assignments: It is impossible to overemphasize the importance of homework. You learn the most from doing the problems yourself, including making and correcting mistakes. You are allowed to discuss homework with fellow students and with me, but ONLY after you have tried the problems yourself. Note that the first step of the solution is usually the key; the rest is usually straightforward. If you habitually rely on others to give you the first step, you probably have not learned the subject. Copying a solution from any source is not helpful and is violation of the honor code

GRADE POLICIES

Grades will be based on weekly homework assignments (35%), a mid-term exam (30%), final exam (35%) and class participation (subjective) (extra 5%). The exams will be open textbook (Townsend) and your own class notes and homework, but are to be done independently, without discussion. The mid-term exam will be handed out in class on Oct. 19 and due at 9 am in class on Oct. 21.

LATE HOMEWORK POLICIES

Homework assignments are due at 9 am on the due date. One problem set will be accepted late, without question, as long as it is submitted by the start of the next class period.

RICE HONOR CODE

In this course, all students will be held to the standards of the Rice Honor Code, a code that you pledged to honor when you matriculated at this institution. If you are unfamiliar with the details of this code and how it is administered, you should consult the Honor System Handbook at http://honor.rice.edu/honor-system-handbook/. This handbook outlines the University's expectations for the integrity of your academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process.

Disability Support Services

If you have a documented disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Disability Support Services (Allen Center, Room 111 / adarice@rice.edu / x5841) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.

Syllabus Change Policy

This syllabus is only a guide for the course and is subject to change with advanced notice.